(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
11 January 2001 (11.01.2001)

PCT

(10) International Publication Number
WO 01/02409 A1

(51) International Patent Classification⁷: C07D 495/04, 491/04, A61K 31/505, A61P 25/14 // (C07D 495/04, 333:00, 239:00)

(21) International Application Number: PCT/GB00/02517

(22) International Filing Date: 30 June 2000 (30.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
9915437.9 1 July 1999 (01.07.1999) GB

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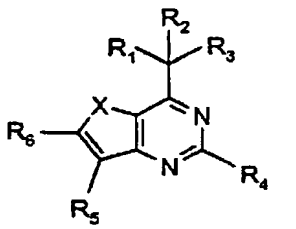
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— *With international search report.*
— *Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THIENO- AND FUROPYRIMIDINE DERIVATIVES AS A2A-RECEPTOR ANTAGONISTS



(I)

(57) Abstract: A compound of formula (I) wherein X is O or S; R_1 and R_2 are independently selected from hydrogen, alkyl, aryl, hydroxy, alkoxy, aryloxy, cyano, nitro, CO_2R_7, COR_7, $OCOR_7CONR_7R_8$, $CONR_7NR_8R_9$, $OCONR_7R_8$, NR_7R_8, NR_7COR_8, $NR_7CONR_8R_9$, $NR_7CO_2R_8$, $NR_7SO_2R_8$, $NR_7CONR_8NR_9R_{10}$, $NR_7NR_8CO_2R_9$, $NR_7NR_8CONR_9R_{10}$, $NR_7SO_2NR_8R_9$, SO_2R_7, SOR_7, SR_7 and $SO_2NR_7R_8$, or R_1 and R_2 together form a carbonyl group (C=O), an oxime group ($C=NOR_{11}$), an imine group ($C=NR_{11}$) or a hydrazone group ($C=NNR_{11}R_{12}$), or R_1 and R_2 together form a 5, 6 or 7 membered carbocyclic or heterocyclic ring; R_3 is alkyl or aryl; R_4, R_5 and R_6 are independently selected from hydrogen, alkyl, aryl, halogen, hydroxy, nitro, cyano, alkoxy, aryloxy, COR_7, $OCOR_7$, CO_2R_7, SR_7, SOR_7, SO_2R_7, $SO_2NR_7R_8$, $CONR_7R_8$, $CONR_7NR_8R_9$, $OCONR_7R_8$, NR_7R_8, NR_7COR_8, $NR_7CONR_8R_9$, $NR_7CO_2R_8$, $NR_7SO_2R_8$, $CR_7{=}NOR_8$, $NR_7CONR_8NR_9R_{10}$, $NR_7NR_8CO_2R_9$, $NR_7NR_8CONR_9R_{10}$, $SO_2NR_7NR_8R_9$, $NR_7SO_2NR_8R_9$, $NR_7NR_8SO_2R_9$, $NR_7NR_8COR_9$, $NR_7NR_8R_9$ and $NR_7CSNR_8R_9$, or R_5 and R_6 together form a 5, 6 or 7 membered carbocyclic or heterocyclic ring; and R_7, R_8, R_9, R_{10}, R_{11} and R_{12} are independently selected from hydrogen, alkyl and aryl, or a pharmaceutically acceptable salt thereof or prodrug thereof, and the use thereof in therapy, particularly in the therapy of a disorder in which the blocking of purine receptors may be beneficial, such as Parkinson's Disease.

WO 01/02409 A1